

PENDING CLAIMS

Claims 1-39 (Cancelled)

40. (Previously Presented) A method for performing handoff in a communication system, the method comprising:

receiving, by a subscriber station, pilot signals and reverse link power control commands from one or more base stations;

selecting a first base station for transmission of forward link data to the subscriber station based, at least in part, on energy of the pilot signals received from the one or more base stations; and

selectively performing a handoff to the first base station based, at least in part, on whether signals transmitted by the subscriber station are received by the first base station with sufficient energy according to the reverse link power control commands received from the first base station.

41. (Previously Presented) The method of claim 40 further comprising:

storing information corresponding to the reverse link power control commands received from the one or more base stations.

42. (Previously Presented) The method of claim 40 wherein selectively performing the handoff comprises:

determining whether it is necessary to perform the handoff to the first base station;

if it is necessary to perform the handoff, determining whether the signals transmitted by the subscriber station are received by the first base station with sufficient energy based, at least in part, on history of the reverse link power control commands received from the first base station; and

if the signals transmitted by the subscriber station are received by the first base station with sufficient energy, permitting the handoff to the first base station.

43. (Previously Presented) The method of claim 42 further comprising:

if the signals transmit by the subscriber station are not received by the first base station with sufficient energy, inhibiting the handoff to the first base station.

44. (Previously Presented) The method of claim 43 wherein inhibiting comprises:

selecting an alternative base station for transmission of forward link data to the subscriber station.

45. (Previously Presented) The method of claim 42 further comprising:

if it is not necessary to perform the handoff, determining whether a base station currently being used for transmission of forward link data to the subscriber station receives signals from the subscriber station with sufficient energy; and

if the base station currently being used does not receive signals from the subscriber station with sufficient energy, performing a handoff to an alternative base station.

46. (Previously Presented) The method of claim 44 wherein performing the handoff to the alternative base station comprises:

selecting the alternative base station based on reverse link power control commands received from the alternative base station indicating that signals transmitted by the subscriber station are received by the alternative base station with sufficient energy.

47. (Previously Presented) The method of claim 43 wherein permitting the handoff to the first base station comprises:

transmitting, by the subscriber station, a message indicating identity of the first base station.

48. (Previously Presented) The method of claim 46 wherein the message further indicates a requested rate to transmit to the subscriber station.

49. (Previously Presented) An apparatus comprising:

a receiver to receive pilot signals and reverse link power control commands from one or more base stations; and

a processor to select a first base station for transmission of forward link data to a subscriber station based, at least in part, on energy of the pilot signals received from the one or more base stations and to selectively perform a handoff to the first base station based, at least in part, on whether signals transmitted by the subscriber station are received by the first base station with sufficient energy according to the reverse link power control commands received from the first base station.

50. (Previously Presented) The apparatus of claim 49 further comprising:

a memory to store information corresponding to the reverse link power control commands received from the one or more base stations.

51. (Previously Presented) The apparatus of claim 50 wherein the processor determines whether it is necessary to perform handoff to the first base station and, if it is necessary to perform handoff to the first base station, determines whether the signals transmitted by the subscriber station are received by the first base station with sufficient energy based, at least in part, on history of the reverse link power control commands received from the first base station.

52. (Previously Presented) The apparatus of claim 51 wherein, the processor permits handoff to the first base station if the signals transmitted by the subscriber station are received by the first base station with sufficient energy.

53. (Previously Presented) The apparatus of claim 51 wherein, if the signals transmit by the subscriber station are not received by the first base station with sufficient energy, the processor inhibits the handoff to the first base station.

54. (Previously Presented) The apparatus of claim 53 wherein the processor selects an alternative base station for transmission of forward link data to the subscriber station.

55. (Previously Presented) The apparatus of claim 51 wherein, if it is not necessary to perform the handoff to the first base station, the processor determines whether a base station currently being used for transmission of forward link data to the subscriber station receives

signals from the subscriber station with sufficient energy and performs a handoff to an alternative base station if the base station currently being used does not receive signals from the subscriber station with sufficient energy.

56. (Previously Presented) The apparatus of claim 55 wherein the processor selects the alternative base station based on reverse link power control commands received from the alternative base station indicating that signals transmitted by the subscriber station are received by the alternative base station with sufficient energy.

57. (Previously Presented) The apparatus of claim 52 wherein the processor transmits a message indicating identity of the first base station.

58. (Previously Presented) The apparatus of claim 57 wherein the message further indicates a requested rate to transmit to the subscriber station.

59. (Previously Presented) A system comprising:
a plurality of base stations, each base station to transmit pilot signals and reverse link power control commands; and
a subscriber station to receive the pilot signals and reverse link power control commands transmitted by the base stations, the subscriber station to select a first base station for transmission of forward link data to the subscriber station based, at least in part, on energy of the pilot signals received from the base stations and to selectively perform a handoff to the first base station based, at least in part, on whether signals transmitted by the subscriber station are received by the first base station with sufficient energy according to the reverse link power control commands received from the first base station.

60. (Previously Presented) The system of claim 59 wherein the subscriber station includes a memory to store information corresponding to the reverse link power control commands received from the base stations.

61. (Previously Presented) The system of claim 59 wherein the subscriber station determines whether it is necessary to perform handoff to the first base station and, if it is necessary to perform handoff to the first base station, determines whether the signals transmitted by the subscriber station are received by the first base station with sufficient energy based, at least in part, on history of the reverse link power control commands received from the first base station.

62. (Previously Presented) The system of claim 61 wherein, the subscriber station permits handoff to the first base station if the signals transmitted by the subscriber station are received by the first base station with sufficient energy.

63. (Previously Presented) The system of claim 61 wherein, if the signals transmit by the subscriber station are not received by the first base station with sufficient energy, the subscriber inhibits the handoff to the first base station.

64. (Previously Presented) The system of claim 63 wherein the subscriber station selects an alternative base station for transmission of forward link data to the subscriber station.

65. (Previously Presented) The system of claim 61 wherein, if it is not necessary to perform the handoff to the first base station, the subscriber station determines whether a base station currently being used for transmission of forward link data to the subscriber station receives signals from the subscriber station with sufficient energy and performs a handoff to an alternative base station if the base station currently being used does not receive signals from the subscriber station with sufficient energy.

66. (Previously Presented) The system of claim 65 wherein the subscriber station selects the alternative base station based on reverse link power control commands received from the alternative base station indicating that signals transmitted by the subscriber station are received by the alternative base station with sufficient energy.

67. (Previously Presented) The system of claim 62 wherein the subscriber station transmits a message indicating identity of the first base station.

68. (Previously Presented) The system of claim 67 wherein the message further indicates a requested rate to transmit to the subscriber station.

69. (Previously Presented) An apparatus for performing handoff in a communication system, the apparatus comprising:

means for receiving, at a subscriber station, pilot signals and reverse link power control commands from one or more base stations;

means for selecting a first base station for transmission of forward link data to the subscriber station based, at least in part, on energy of the pilot signals received from the one or more base stations; and

means for selectively performing a handoff to the first base station based, at least in part, on whether signals transmitted by the subscriber station are received by the first base station with sufficient energy according to the reverse link power control commands received from the first base station.

70. (Previously Presented) The apparatus of claim 69 further comprising:

means for storing information corresponding to the reverse link power control commands received from the one or more base stations.

71. (Previously Presented) The apparatus of claim 69 wherein means for selectively performing the handoff comprises:

means for determining whether it is necessary to perform the handoff to the first base station;

means for determining, if it is necessary to perform the handoff, whether the signals transmitted by the subscriber station are received by the first base station with sufficient energy based, at least in part, on history of the reverse link power control commands received from the first base station; and

means for permitting the handoff to the first base station, if the signals transmitted by the subscriber station are received by the first base station with sufficient energy.

72. (Previously Presented) The apparatus of claim 71 further comprising:

means for inhibiting the handoff to the first base station, if the signals transmit by the subscriber station are not received by the first base station with sufficient energy.

73. (Previously Presented) The apparatus of claim 71 further comprising:

means for determining, if it is not necessary to perform the handoff to the first base station, whether a base station currently being used for transmission of forward link data to the subscriber station receives signals from the subscriber station with sufficient energy; and

means for performing a handoff to an alternative base station, if the base station currently being used does not receive signals from the subscriber station with sufficient energy.

74. (Previously Presented) The apparatus of claim 71 wherein means for permitting the handoff to the first base station comprises:

means for transmitting a message indicating identity of the first base station.

75. (Previously Presented) The apparatus of claim 74 wherein the message further indicates a requested rate to transmit to the subscriber station.

76. (Previously Presented) In a wireless communication system, a method for performing handoff comprising:

determining, by a subscriber station, when a handoff is necessary;

receiving, by the subscriber station, reverse link power control commands; and

selectively performing said handoff in accordance with said reverse link power control commands.

77. (Previously Presented) The method Claim 76 wherein selectively performing said handoff comprises:

selecting, by the subscriber station, a base station to transmit to said subscriber station;

determining, by the subscriber station, in accordance with said reverse link power control commands whether signals transmitted by said subscriber station are being received by said selected base station with sufficient energy; and

performing said handoff to said selected base station when signals transmitted by said subscriber station are being received by said selected base station with sufficient energy.

78. (Previously Presented) The method of Claim 77 wherein performing said handoff comprises transmitting, by the subscriber station, a message indicating the identity of said selected base station.

79. (Previously Presented) The method Claim 76 wherein selectively performing said handoff comprises:

determining, by the subscriber station, that a base station used to communicate with said subscriber station continues to have the strongest signal received by said subscriber station;

determining, by the subscriber station, in accordance with said reverse link power control commands whether signals transmitted by said subscriber station are being received by said determined base station with sufficient energy; and

performing said handoff to an alternative base station when signals transmitted by said subscriber station are not being received by said determined base station with sufficient energy.

80. (Previously Presented) An apparatus comprising:

a memory configured to store reverse link power control commands provided by one or more base stations; and

a processor, coupled with the memory, configured to permit a handoff to a selected base station of the one or more base stations according to the reverse link power control commands.

81. (Previously Presented) The apparatus of claim 80, wherein the reverse link power control commands requesting the subscriber station to decrease its transmission energy are indicative that the reverse link signal is being received.

82. (Previously Presented) The apparatus of claim 80, wherein the reverse link power control commands requesting the subscriber station to increase its transmission energy are indicative that the reverse link signal is not being received.

83. (Previously Presented) An apparatus comprising:
a memory configured to store messages, provided by one or more base stations, indicating the average quality of a reverse link signal received by the one or more base stations; and
a processor, coupled with the memory, configured to permit a handoff to a selected base station of the one or more base stations according to the messages.

84. (Previously Presented) A communication system comprising:
a subscriber station for transmitting a signal;
a plurality of base stations, each base station configured to receive the signal and transmit reverse link power control commands; and
wherein the subscriber station is configured to permit a handoff to a selected base station of the plurality of base stations according to the reverse link power control commands.

85. (Previously Presented) The communication system of claim 84, wherein the reverse link power control commands requesting the subscriber station to decrease its transmission energy are indicative that the signal is being received.

86. (Previously Presented) The communication system of claim 84, wherein the reverse link power control commands requesting the subscriber station to increase its transmission energy are indicative that the signal is not being received.

87. (Previously Presented) In a wireless communication system, an apparatus for performing handoff comprising:
means for determining when a handoff is necessary;
means for receiving reverse link power control commands; and
means for selectively performing said handoff in accordance with said reverse link power control commands.

88. (Previously Presented) An apparatus comprising:
a memory configured to store messages, provided by one or more base stations, indicating a rate request of reverse link transmissions by the apparatus; and
a processor, coupled with the memory, configured to permit a handoff to a selected base station of the one or more base stations according to the stored messages.

89. (Previously Presented) An apparatus comprising:
means for storing messages, provided by one or more base stations, indicating a rate request of reverse link transmissions by the apparatus; and
means for permitting a handoff to a selected base station of the one or more base stations according to the stored messages.

90. (Previously Presented) A method for performing handoff in a wireless communication system, comprising:
selecting a first base station for transmission of forward link data;
determining handoff is necessary for transmission of forward link data by the first base station;
determining if the first base station is receiving reverse link transmissions associated with the forward link data;
prohibiting handoff to the first base station if the first base station is not receiving reverse link transmissions; and
allowing handoff to the first base station if the first base station is receiving reverse link transmissions.

91. (Previously Presented) A method as in claim 90, further comprising:
receiving from the first base station a message indicating a quality of the received reverse link signal.

92. (Previously Presented) A method as in claim 91, wherein the received reverse link signal is a data request control signal.

93. (Previously Presented) A method as in claim 90, wherein determining handoff is necessary further comprises:

determining the first base station was not selected for transmission of a last frame of data.

94. (Previously Presented) A remote station supporting handoff in a wireless communication system, comprising:

means for selecting a first base station for transmission of forward link data;

means for determining handoff is necessary for transmission of forward link data by the first base station;

means for determining if the first base station is receiving reverse link transmissions associated with the forward link data;

means for prohibiting handoff to the first base station if the first base station is not receiving reverse link transmissions; and

means for allowing handoff to the first base station if the first base station is receiving reverse link transmissions.

95. (Previously Presented) The remote station as in claim 94, further comprising:

means for receiving from the first base station a message indicating a quality of the received reverse link signal.

96. (Previously Presented) A method for performing handoff in a wireless communication system, comprising:

receiving a message indicating reverse link reception quality for a first base station; and

selecting the first base station for a forward link data transmission if the reverse link reception quality is above a threshold based on the message.